

REMARKS

The application has been amended and is believed to be in condition for allowance. The instant amendment is submitted as part of a Request for Continued Examination ("RCE").

As an initial matter, the Advisory Action of April 8, 2009 following the Amendment After Final filed April 2, 2009 is acknowledged in that none of the amendments, including the amendments of section heading to the specification, were entered. Accordingly, amendments to the application previously submitted with the Amendment After Final are re-submitted, with revisions, as part of the instant amendment and RCE.

Amendments to the Disclosure

The specification is amended to include section headings.

Claim 4 is amended to clarify the recitation of the invention in consideration of antecedent basis issues, in particular with respect to the recitations of "this point" in sub-paragraph b) and "this new point" in sub-section c). Claim 4 is amended to provide proper antecedents for the aforementioned points, and further to revise the term "this" with "the". The foregoing amendment finds support in the specification and the drawing figures as originally filed (e.g., page 7, 8-11; page 11, lines 1-10).

Claim 4 is further amended to recite a series of the following steps performed by a computational device configured to

process the digitized two dimensional image. The amendment finds support in the specification as originally filed. For example, the specification discloses that "process consists in analyzing a digitized image obtained in the present case from X ray emission," (page 7, lines 3-6). The parameter α "is determined from a digitized two dimensional image for example obtained with x ray... To determine this new parameter α , there is first of all chosen at random a two dimensional pixel of the image" (page 10 line 28 to page 11 line 3).

It is respectfully submitted that one of skill would readily understand from the specification as originally filed that the disclosed digitized image, comprised of pixels, inherently requires a digital storage medium, such as a computer memory or storage device, upon which the image is tangibly stored, and further that a computational device, capable of reading and processing the digital image from the storage medium, is inherently disclosed to perform the recited steps of the invention upon the digital image.

For example, Wikipedia describes a "digital image" as a "two-dimensional image using ones and zeros (binary)", and that the term "digital image", if unqualified, refers to "raster images," (http://en.wikipedia.org/wiki/Digital_image; accessed June 4, 2009) which in turn are described as "computer graphics... a raster graphics image or bitmap... a data structure representing a generally rectangular grid of pixels, or points of

color, viewable via a monitor, paper, or other display medium," (http://en.wikipedia.org/wiki/Raster_image; accessed June 4, 2009). A "pixel" is defined as "basic unit of the composition of an image on a television screen, computer monitor, or similar display," (The American Heritage® Dictionary of the English Language, Fourth Edition. Houghton Mifflin Company, 2004. Dictionary.com <http://dictionary.classic.reference.com/browse/pixel>; accessed June 4, 2009). Hence, there is a readily understood relationship between a digitized image, comprising pixels, and computer devices.

It is further respectfully submitted that one of skill would readily understand from the specification that the computational device for performing the recited steps would inherently include a tangible computer storage device upon which to store the results of the recited computational steps, e.g. α .

It is therefore respectfully submitted that the amendment of claim 4 to recite the step performed by a computational device do not introduce new matter. 35 USC 112 requires that the specification to be enabling only to a person skilled in the art to which it pertains, or with which it is most nearly connected. "Whether the specification would have been enabling as of the filing date involves consideration of the nature of the invention, the state of the prior art, and the level of skill in the art.... The state of the prior art is what one skilled in the art would have known, at the time the

application was filed, about the subject matter to which the claimed invention pertains," (MPEP § 2164.05(a)). "The specification need not disclose what is well-known to those skilled in the art and preferably omits that which is well-known to those skilled and already available to the public," (*I.d.*; emphasis added).

Accordingly, it is respectfully submitted that the foregoing amendments as to a computational device find support in the specification as originally filed, and do not introduce new matter.

Claims 4-11 are amended with non-substantive revisions as to style in consideration of U.S. practice and preferences, and further to address antecedent basis issues.

Further in consideration of U.S. practice and preferences, the underlining of the variables r and α in claims 4, 6, 7, and 9-11, as presented in the claims as originally filed, is removed.

No new matter is introduced by way of these amendments.

Pending Claim Rejections

The Official Action indicated that claims 4-11 are allowed.

The Official Action rejected claims 1-3 and 12-13 under 35 USC 103(a) as being unpatentable over Grunkin et al. (US 6,226,393) in view of Majumdar et al., "High Resolution Magnetic

Resonance Imaging: Three Dimensional Trabecular Bone Architecture And Biomechanical Properties," (1998).

In response, claims 1-3 and 12-13 are canceled, without prejudice. Applicants reserve the right to reintroduce the subject matter of the canceled claims in a continuing application at their discretion.

Patentability of the Remaining Claims

All the claims remaining in the application are believed to be in allowable condition.

It is further respectfully submitted that the claims as presented, recite patentable subject material under section 101, the recited process being tied to a particular machine (e.g., a computational device).

From the foregoing, it will be apparent that Applicants have fully responded to the October 7, 2008 Official Action and that the claims as presented are patentable. In view of this, Applicants respectfully request a Notice of Allowance for this application.

In order to expedite the prosecution of this case, the Examiner is invited to telephone the attorney for Applicants at the number set forth below if the Examiner is of the opinion that there are any further issues to be resolved before proceeding to allowance.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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